# TREVOR LAUER TESTIMONY TO

# THE SENATE ENERGY & TECHNOLOGY COMMITTEE

Good afternoon, Mr. Chairman and Senate Energy & Technology committee members. My name is Trevor Lauer. I am the Vice President of Marketing & Renewables for DTE Energy which is located in Michigan. I'd like to thank you for the opportunity to testify today about the benefits provided and the progress made to-date in implementing the renewable energy provisions of PA 295.

As the DTE Energy executive in charge of both renewable energy and energy efficiency programs, I feel strongly that PA 295 has been successful so far. Through PA 295, Michigan has appropriately balanced aggressive renewable targets with cost affordability. Large and small scale renewable projects are moving forward, providing Michigan jobs and driving economic activity, and renewable energy prices have fallen much lower than we would have predicted just a few years ago. This has all been made possible by Michigan's comprehensive energy legislation passed in 2008.

My comments today will describe how PA 295 has been successful in those three areas – progress made to-date, economic development benefits, and improving cost and efficiency trends for renewable energy in Michigan.

### PROGRESS MADE TO-DATE & ECONOMIC DEVELOPMENT

Back in 2008, when PA 295 was passed, DTE Energy's utility renewable energy portfolio was only about 1% (or ~400,000 MWh's) of electric sales. Significant progress has been made over the past 3 years, creating opportunities for Michigan businesses and new Michigan jobs:

- In late 2008, right after PA 295 was passed, Detroit Edison issued a Request for Proposal which resulted in renewable contracts with three Michigan-based renewable energy suppliers.
- In early 2009, Detroit Edison contracted with Heritage Sustainable Energy, a Michiganbased wind developer, for 26MW of renewable energy ... allowing Heritage to construct the Stoney Corners Wind Farm Located near Cadillac:
  - To my knowledge, this was the first wind farm built as a direct result of Michigan's PA 295.

- o This project created more than 100 construction jobs and four full-time jobs at the site, and has provided additional economic development benefits during subsequent phases as the wind farm has expanded.
- o In addition, Detroit Edison, Heritage, and the Michigan Economic Development Corporation collaborated in bringing new advanced turbine technology and manufacturing to Michigan, resulting in a Michigan-made, Northern Power Systems pilot wind turbine being installed at the Stoney Corners site.
- o This innovative turbine uses combination of permanent magnet generators and advanced direct-drive design. In addition to being more efficient, this design eliminates the need for a gearbox and thus removes a major area of component failure compared to other wind turbine designs.
- In 2010, DTE Energy executed contracts to become the off-taker and co-owner in what will be the largest wind farm in Michigan.
  - Located on 30,000 acres in Gratiot County, this wind farm will include 133 wind turbines that will generate more than 210 MW's of electricity when the facility becomes operational in early 2012 – enough to power approximately 50,000 Michigan homes.
  - O The project is well underway and has created more than 200 construction jobs that have been filled by workers employed by Aristeo Construction, a Michigan company. In addition, 15 permanent, high-tech positions are expected to be created locally.
- Early in 2011, DTE Energy announced plans to construct three wind farms on approximately 15,000 acres in the Thumb area of Michigan. We will invest approximately \$250 million to construct nearly 70 wind turbines that, together, will be capable of generating about 110 MW of electricity. We have selected General Electric to provide the turbines, and Southfield, Mich.-based Barton Malow Co. as the construction contractor. The project, expected to be completed by the end of 2012, will employ 110 to 120 construction workers and create up to 12 full-time, permanent positions.
- And this past summer, DTE Energy also contracted to purchase all of the energy produced from a 120 MW, 9,000-acre wind farm in Tuscola County, which is enough to power more than 30,000 homes. The wind farm represents a \$250 million investment in the community that -- over 30 years -- is expected to generate \$50 million in lease payments to landowners, \$19 million in property taxes and provide \$21 million in wages and benefits. This project is expected to come on-line by the end of 2012.
- Additionally, Detroit Edison has launched a solar program called SolarCurrents<sup>TM.</sup> One aspect of this program will help around 600 Detroit Edison customers purchase and

install solar energy systems for their homes or businesses to meet their own energy needs as well as to sell power back to Detroit Edison.

A second component of the SolarCurrents<sup>TM</sup> program involves constructing Detroit Edison-owned solar photovoltaic (PV) installations at customer and company owned sites. We have already installed PV systems at the GM Hamtramck plant which produces the Chevy Volt, at the Ford Wayne assembly plant which produces the hybrid Focus, at Blue Cross and Blue Shield in downtown Detroit, and at Monroe County Community college where we are supporting the development of an alternative energy curriculum.

All of these efforts represent real and significant progress toward achieving Michigan's renewable energy goals.

Starting from a generation portfolio that was 1% renewable, DTE Energy has now contracted for just over 6% of its expected renewable sales for 2015. In total, DTE Energy expects to create a renewable portfolio of 1,000 MWs, representing \$4 billion of direct investments in Michigan – about half by my company and a similar amount of investment by our contracted renewable suppliers.

These investments are real, they are big, and they are having a positive impact in Michigan communities right now. Just ask the office supply store in Bad Axe Michigan who recently got a \$10,000 order for offices supplies to equip Barton Malow's construction trailers for our Thumb wind projects. Or talk to the restaurant, hotel, and gas station owners in Breckinridge, near the Gratiot Wind Farm. We are very proud of our ability to focus much of our renewable spend on Michigan firms, while not compromising cost or quality

Which brings me to my last area of focus ... the improving cost and efficiency trends for renewable energy in Michigan.

## COST & EFFICIENCY TRENDS FOR RENEWABLE ENERGY IN MICHIGAN

Technology advances and design enhancements are driving increased efficiency and lower long term costs for renewable power. From our first wind farm power purchase contract in early 2009 to the one we signed this past August, wind energy prices have dropped 47%. The long term levelized cost of wind energy in Michigan has decreased to the point that it is a viable economic option to consider for DTE Energy's long term generation plans. As long as the right supporting energy legislation, such as PA295, and a strong and collaborative regulatory construct are in place, our expectation is that this trend will continue, as will the positive economic impacts for Michigan.

#### **CONCLUSION**

We feel strongly that progress is being made under Michigan's current energy reform legislation. It is our belief that Michigan was one of the few states that got it right when implementing energy reforms. This legislation was implemented through the collaboration and support of a broad spectrum of stakeholders — such as environmental groups, electric providers, customers and customer advocacy groups, Michigan businesses, and governmental officials. It took two years of extensive collaboration to develop a set of bills that balanced these interests.

Customer affordability was assured both through cost caps and through concurrent implementation of renewable energy targets and energy efficiency targets. Customers can use the energy efficiency programs to reduce energy costs and to offset the surcharges that fund renewables and energy efficiency.

Michigan's energy reform bills created a framework for moving aggressively to implement renewable energy -- significant progress is being made, creating business opportunities and jobs in Michigan, at prices much lower than was predicted just a few years ago.

In closing, I want to congratulate the Michigan legislature for the carefully planned and balanced approach that was taken with respect to energy reform in 2008. Let me emphasize that DTE Energy strongly supports the development of renewable energy and the diversification of our current generation mix. We respectfully request that Michigan's current energy reform laws be retained in their current structure and content. Doing so will ensure continued progress in renewable energy development and continued economic development for Michigan, while assuring customer affordability through the carefully balanced framework provided by PA 295 and PA 286.

Thank you.